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Derwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. Complete if Known Substitute for form 1449A/PTO Application Number 10/086,335 3/1/2002 INFORMATION DISCLOSURE Filing Date et al. First Named Inventor STATEMENT BY APPLICANT 1646 Art Unit Examiner Name (use as many sheets as necessary) 4532670/59100 Attorney Docket Number

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U.S. PATENT DOCUMENTS Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear Name of Patentee or **Publication Date** Document Number Applicant of Cited Document MM-DD-YYYY Cite Examiner Number - Kind Code<sup>2</sup> (if known) No. Initials\* 7/17/2001 US-6,261,598 US-US-US-US US-US-US-US-US-US-US-US-US-US-US-US-US-US-US-

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|           | U.S. PATENT DOCUMENTS                            |  |                  |                             |   |  |  |  |  |  |  |
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| Examiner  | Cite   | Document Number                            | Publication Date | Name of Patentee or         | Pages, Columns, Lines, Where                    |  |  |  |  |  |  |
| Initials* | No.1   | Number - Kind Code <sup>2</sup> (if known) | MM-DD-YYYY       | Applicant of Cited Document | Relevant Passages or Relevant<br>Figures Appear |  |  |  |  |  |  |
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| FOREIGN PATENT DOCUMENTS |              |  |                                |  |   |         |  |  |  |  |
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| Examiner<br>Initials*    | Cite<br>No.1 | Foreign Patent Document  Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>6</sup> (if known) | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages<br>or Relevant Figures Appear | 1*      |  |  |  |  |
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|                       |              | OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS  |  |  |  |  |  |
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| Examiner<br>Initials* | Cite<br>No.1 |  |  |  |  |  |  |
| mr)                   | ·            | SEDDON ET AL., <u>J. Amer. Med. Assoc.</u> , 1994, 272(18): p.1413-1420.   |  |  |  |  |  |
|                       |              | HARMSEN, P.F.H., ET AL., "Microencapsulation of carotene by supercritical CO2", 2001, IFSCC Magazine, 4: p.34-36.  |  |  |  |  |  |
|                       |              | JOUNI, ZEINAB E. AND WELLS, MICHAEL A., "Purification and Partial Characterization of a Lutein-binding Protein from the Midgut of the Silkworm Bombyx mon", The Journal of Biological Chemistry, Issue 25: p.14722-14726.        |  |  |  |  |  |
| 1                     | UI           | YEMELYANOV, ALEXANDER YU, KATZ, NIKITA B., AND BERNSTEIN, PAUL S., "Ligand-Binding Characterziation of Xanthophyll Carotenoids to Solubilized Membrane Proteins Derived from Human Retina", Exp. Eye Res., 2001, Academic Press. |  |  |  |  |  |
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